A new species of Agaon from Nigeria (Hymenoptera, Chalcidoidea)

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In several shipments, Dr. J. T. MEDLER (University of Ife, Nigeria) sent samples of interesting fig wasps for identification. While most of these will be recorded in forthcoming revisions of their respective genera, one rather peculiar form is described in the present paper. The material is part of the collections of the Rijksmuseum van Natuurlijke Historie, Leiden (RMNH); five σ paratypes will be deposited in the British Museum (Natural History), London, and five in the Snow Entomological Museum, Lawrence (Kansas, USA).

Agaon medleri nov. spec.

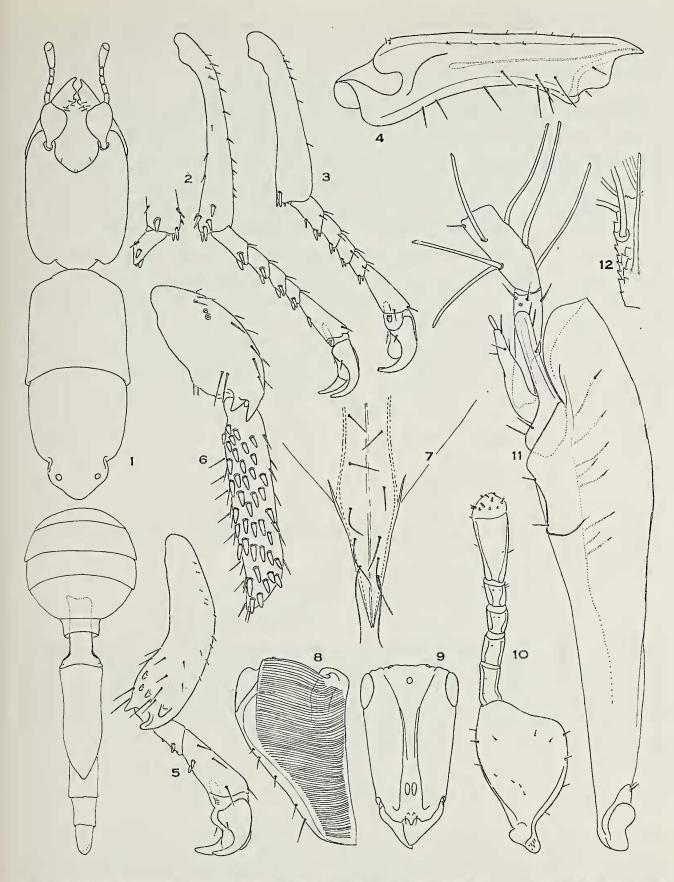
Material. — 6 9 and some fragments, 42 3, Nigeria, W.-state: Idanre, leg. J. T. MEDLER, 2.V.1970; RMNH no. 1703, 3 holotype slide 1703a.

D e s c r i p t i o n. — Male. Head (fig. 1): length along the mid-line approximately equal to the width, the antennae and mandibles inserted on anterior outgrowths; ventral surface setose. Eyes totally absent. Antenna (fig. 10): the scape expanded, not nearly twice as long as maximally wide; the pedicel slender, twice as long as wide; the three funicular segments approximately in length ratio 6:5:4, the club slightly longer than the combined lengths of the funicular segments. Mandible (fig. 4) five to six times as long as wide, tridentate at its tip; one gland. Astomous.

Thorax (fig. 1) dorsally consisting of two subequal sclerites, representing the pronotum and the fused meso- and metanota, respectively; the caudal sclerite, except laterally, fused with the propodeum. The pro-episterna are very large, occupying almost the total ventral surface of the prothorax; the prosterna are two small sclerites. Fore tibia, not quite half as long as the femur, with a number of apical teeth (fig. 5) viz., one large dorsal, with a smaller antiaxial; one ventral, with one to three antiaxials, and several stout setae in the ventral apex; the tarsal segments approximately in ratio 3:4; the metatarsus with two (to four) ventral, conical spines, the distal segment with two such spines. Mid leg rather robust; the femur with some stout setae along the dorsal edge and on the discs; the tibia (fig. 2) with seven apical spines in the ventral apex; the tarsal segments approximately in ratio 10:6:5:4:12, the first to fourth segments with three apical spines, the fifth with only one. Hind leg much as the mid leg; the tibial armature (fig. 3) consisting of three spines only; the tarsal segments (the first of which has five ventral spines; the second to fourth, two) approximately in ratio 8:5:5:4:12.

Gaster (fig. 1) subglobular, the seventh segment shaped so as to form a collar, through which the long peduncle of the eighth is capable of movement; the genitalia without digiti or parameres.

Length (head and thorax), ca. 2.5 mm.



Figs. 1—12. Agaon medleri nov. spec. 1, δ head, thorax, and gaster (from 3rd tergite onwards); 2, δ mid tibia and tarsus, and detail; 3, δ hind tibia and tarsus; 4, δ mandible; 5, δ fore tibia and tarsus; 6, φ fore tibia and metatarsus; 7, φ hypopygium; 8, φ mandible; 9, φ head; 10, δ antenna; 11, φ antennal scape, pedicel, and three segments; 12, φ, eighth antennal segment, detail.

Figs. 1, 4, 10, dorsal aspect; 2, 3, axial aspect; 5, 6, 11, 12, and detail of 2, antiaxial aspect; 7, 8, ventral aspect; 9, frontal aspect; 1, 9, \times 30; 2–5, 7, 8, 10, \times 105; 6, 11, 12, \times 210.

Fe m a l e. Width of the head (fig. 9) across the compound eyes 0.6 of the length (without the mandibles); the longitudinal diameter of the eye not quite one-third of the cheek. Three ocelli. Antenna eleven-segmented; the scape (fig. 11) four times as long as its maximum width, with a distinct ventral, triangular prominence, expanded distad; the pedicel short, with a dorsal spatulate outgrowth almost as long as the third segment; the third segment with a spatulate apical seta; the fourth slightly longer than the third; the fifth to eleventh with long flexible sensilla chaetica, the seventh to eleventh with scale-like sculpture on the ventral surface (fig. 12). Mandible (fig. 8) largely protruding, without teeth but with ca. seventy-five to eighty ventral ridges; the appendages covering almost the total ventral surface of the head, each two and a half times as long as wide, with some sixty to seventy rows of approximately eighty teeth (in the axial, proximal third changing into ridges). Labium and maxilla much as depicted by GRANDI (1916: 209, fig. 24-8), but the labium without setae.

Thorax like that figured by GRANDI (1916: 211, 213, figs. 25, 26), with sternal pollen pockets. Fore wing (2:1), 2 mm long; the marginal, stigmal, and post-marginal veins approximately in ratio 13:10:20; the hind wing (3:1) ca. 1 mm long. Fore leg (fig. 6): the tibia with two apical teeth, and a smaller one in between; the tarsal segments approximately in ratio 24:8:7:5:10, with antiaxial spines as follows (right and left legs of one female): 41-44, 13-12, 7-7, 6-5, 7-10. Mid leg, tarsal ratio 18:6:6:5:7; hind leg, tarsal ratio 35:12: 12:9:13.

Gaster: the hypopygium (fig. 7) long and acuminate, with long apical setae; the ovipositor almost twice as long as the gaster.

Length (head, thorax and gaster), ca. 3 mm.

Discussion. — The female of Agaon medleri, notwithstanding the remarkable differential characters e.g., of the trophi and antennae, evidently is closely related to A. hamiferum (Kieffer) (GRANDI, 1916: 207—221, figs. 24—28, sub A. ? paradoxum). It runs to couplet 4 of my key (WIEBES, 1969: 454—456). The male does not fit into the key (couplet 7 onwards): it can be differentiated by the peculiar shape of the head and the gaster.

References

GRANDI, G., 1916. Gli Agaonini (Hymenoptera Chalcididae) raccolti nell' Africa occidentale dal Prof. F. Silvestri. — Boll. Lab. Zool. Portici, 10: 121–286, figs. 1–52.

WIEBES, J. T., 1969. Hymenoptera Agaonidae, with an introductory chapter on West African fig wasps. — Ann. Mus. Roy. Afr. centr., in 8, Zool., 175: 449—464, figs. 1-38.

Aangeboden. Microlepidoptera Palaearctica, deel 1 en 2, met 20 % korting, deel 1 voor f 135,---, deel 2 voor f 260,---.

H. H. DIJKSTRA, Spitaal 5, Sneek.